

## **AMENDMENTS TO THE CLAIMS**

Claims 1-30 (Cancelled)

31.(Currently Amended) A diaper product ~~(2, 6)~~ comprising:

    a ~~disposal~~disposable diaper ~~(21)~~;

    an auxiliary absorbent pad ~~(61)~~ attached inside said ~~disposal~~disposable diaper ~~(21)~~, for receiving excrement from a wearer;

    a first IC tag ~~(5b)~~ having a first IC chip and a first antenna for radio communication connected to said first IC chip, said first IC tag being attached to said ~~disposal~~disposable diaper; and

    a second IC tag ~~(5e)~~ having a second IC chip and a second antenna for radio communication connected to said second IC chip, said second IC tag being attached to said auxiliary absorbent pad,

    wherein a serial number for discriminating said ~~disposal~~disposable diaper ~~(21)~~ from other ~~disposal~~disposable diapers is stored in said first IC chip and can be read out through said first antenna, and

wherein a serial number for discriminating said auxiliary absorbent pad ~~(61)~~ from other auxiliary absorbent pads is stored in said second IC chip and can be read out through said second antenna.

32. (Cancelled)

33. (Currently Amended) A supply information management system for managing information on supply of diaper products, comprising:

a writing device-(711) provided in a station-(701 to 705) where a predetermined process of at least one of manufacturing, inspecting, storing, shipping and selling on supply of a diaper product-(1 to 4, 6) is performed, said writing device being provided for writing to store process information on said predetermined process to an IC chip of an IC tag-(5) attached to said diaper product-(1 to 4, 6) through an antenna of said IC tag-(5) for radio communication;

a reading device-(711) for reading a process information together with a serial number stored in an IC chip;

a product database storage part-(724) for storing a product database-(91) which is a set of data elements each associating a serial number with process information; and

a product database updating part-(723) for specifying a data element in said product database-(91), which includes a serial number read out by said reading device-(711), and adding process information read out by said reading device-(711) to said data element.

34. (Currently Amended) The supply information management system-(710) according to claim 33, further comprising:

a confirming part-(720) for confirming whether process information read out by said reading device-(711) between a first process included in said predetermined process and a second process after said first process includes first process information written to said IC chip by said writing device-(711) in said first process; and

a transmitting part-(721) for transmitting a serial number and first process information which are read out by said reading device-(711) to said product database updating part-(723) in

a case where process information confirmed by said confirming part-(720) includes said first process information.

35. (Currently Amended) The supply information management system-(710)- according to claim 33, further comprising:

a portable reading device-(717)- for reading a serial number and process information stored in an IC chip of an IC tag-(5)- attached to a diaper product-(1 to 4, 6)- in a noncontact manner and outputting said serial number and said process information.

36. (Currently Amended) The supply information management system-(710)- according to claim 35, wherein said serial number and said process information which are read out by said reading device-(711)- and/or said portable reading device-(717)- are transmitted to said product database updating part-(723)- through internet-(714).

37. (Currently Amended) The supply information management system-(710)- according to claim 33, wherein said station includes at least one of a manufacturing station-(701)- for performing a process of manufacturing a diaper product-(1 to 4, 6), an inspection station-(702)- for performing a process of inspecting a diaper product-(1 to 4, 6), a storage station-(703)- for performing a process of storing or retrieving a diaper product-(1 to 4, 6), a shipping station-(704)- for performing a process of shipping a diaper product-(1 to 4, 6)- and a sales station-(705)- for performing a process of selling a diaper product-(1 to 4, 6).

38. (Currently Amended) The supply information management system-(710)- according to claim 37, wherein said station includes said manufacturing station-(701), and wherein said writing device-(711)- provided in said manufacturing station-(701)- writes at least one of a product model type indicating a kind of said diaper product-(1 to 4, 6)- and its manufacturing date and time to said IC chip as said process information.

39. (Currently Amended) The supply information management system-(710)- according to claim 37, wherein said station includes said inspection station-(702), and wherein said writing device-(711)- provided in said inspection station-(702)- writes at least one of inspecting date and time of a said diaper product-(1 to 4, 6), an inspector name and an inspecting device to said IC chip as said process information.

40. (Currently Amended) The supply information management system-(710)- according to claim 37, wherein said station includes said storage station-(703), and wherein said writing device-(711)- provided in said storage station-(703)- writes at least one of storing date and time and retrieving date and time of a said diaper product-(1 to 4, 6)- to said IC chip as said process information.

41. (Currently Amended) The supply information management system-(710)- according to claim 37, wherein said station includes said shipping station-(704), and wherein said writing device-(711)- provided in said shipping station-(704)- writes at least one of shipping date and time and a destination of said diaper product-(1 to 4, 6)- to said IC chip as said process information.

42. (Currently Amended) The supply information management system-(710) according to claim 37, wherein said station includes said sales station-(705), and  
wherein said writing device-(711) provided in said sales station-(705) writes selling date and time of said diaper product-(1 to 4, 6) to said IC chip as said process information.

43. (Currently Amended) A supply information management system-(710a) for managing information on supply of diaper products, comprising:

a reading device-(711a) for reading a serial number stored in an IC chip of an IC tag-(5) attached to a diaper product-(1 to 4, 6) through an antenna of said IC tag-(5) for radio communication;

a product database storage part-(724) for storing a product database-(91) which is a set of data elements each associating a serial number of a diaper product-(1 to 4, 6) with process information on a predetermined process of at least one of manufacturing, inspecting, storing, shipping and selling on supply of said diaper product-(1 to 4, 6); and

a product database updating part-(723) for specifying a data element in said product database-(91), which includes a serial number read out by said reading device-(711a), and adding process information on a process for a diaper product-(1 to 4, 6) to said data element when said process is performed.

44. (Currently Amended) A usage information management system-(810) for managing information on usage of diaper products, comprising:

a reading device-(811) for reading a product model type indicating a kind of a diaper product-(2,6) and a serial number which are stored in advance in an IC chip of an IC tag-(5) attached to said diaper product-(2,6) through an antenna of said IC tag-(5) for radio communication;

a stock database storage part-(831) for storing a stock database-(92) which is a set of data elements each associating a serial number of a diaper product-(2,6) with a product model type and a state of usage of said diaper product-(2,6);

a stock database updating part-(832) for specifying a data element in said stock-database-(92), database, which includes a serial number read out by said reading device-(811), and updating a value of a data item in said data element which indicates a state of usage from a value of "unused" to that of "used" when said diaper product-(2,6) is put on a wearer; and

a stock number obtaining part-(833) for specifying data elements in said stock-database-(92), database, each of which includes one product model type out of a plurality of product model types and a data item indicating said state of usage which has a value of "unused", and obtaining the number of said data elements as a stock number for a diaper product corresponding to said product model type.

45. (Currently Amended) The usage information management system-(810) according to claim 44, further comprising:

an order condition storage part-(834) for storing a stock threshold value and the number of reordered products corresponding to each of said plurality of product model types; and

a reorder part-(835) for transmitting a product model type and order information indicating the number of reordered products for said product model type to a selling agency

through a communication network (911) when a stock number for a diaper product (2, 6) corresponding to said product model type, which is obtained by said stock number obtaining part (833), falls short of a stock threshold value of said product model type.

46. (Cancelled)

47. (Currently Amended) A usage information management system for managing information on usage of diaper products, comprising: The usage information management system (810) according to claim 46, further comprising:

a first reading device for reading a product model type indicating a kind of diaper product, which is stored in an IC chip of an IC tag attached to a diaper product through an antenna of said IC tag for radio communication;

a second reading device for reading a wearer identification number for discriminating one wearer of a diaper product from other wearers;

a wearer database storage part for storing a wearer database which is a set of data elements each associating a wearer identification number with an applicable model type which is a product model type of a diaper product to be put on a wearer corresponding to said wearer identification number;

a model type check part for specifying a data element in said wearer database, which includes a wearer identification number read out by said second reading device, and checking an applicable model type in said data element with a product model type read out by said first reading device; and

a wearer database updating part-(851) for specifying a data element in said wearer database-(93), which includes a wearer identification number read out by said second reading device-(811), and updating a value of applicable model type in said data element to a product model type read out from a diaper product-(2,6) by said first reading device-(811) when a change of applicable model type of a diaper product-(2,6) to be put on a wearer is needed.

48. (Currently Amended) A usage information management system for managing information on usage of diaper products, comprising: The usage information management system (810) according to claim 46, wherein

a first reading device for reading a product model type indicating a kind of diaper product, which is stored in an IC chip of an IC tag attached to a diaper product through an antenna of said IC tag for radio communication;

a second reading device for reading a wearer identification number for discriminating one wearer of a diaper product from other wearers;

a wearer database storage part for storing a wearer database which is a set of data elements each associating a wearer identification number with an applicable model type which is a product model type of a diaper product to be put on a wearer corresponding to said wearer identification number; and

a model type check part for specifying a data element in said wearer database, which includes a wearer identification number read out by said second reading device, and checking an applicable model type in said data element with a product model type read out by said first reading device,

wherein a data element of said wearer database-(93) includes latest wearing date and time associated with a wearer identification number, and when one diaper product-(2,6) is put on a wearer, said wearer database updating part (851) specifies a data element in said wearer database-(93), which includes a wearer identification number read out by said second reading device-(811), and updates latest wearing date and time in said data element.

49. (Currently Amended) The usage information management system-(810) according to claim 48, further comprising a change-scheduled date and time output part-(853) for outputting next change-scheduled date and time for each wearer on the basis of a wearer identification number, latest wearing date and time and a change interval included in a data element corresponding to said each wearer.

50. (Currently Amended) The usage information management system-(810) according to claim 49, wherein a data element of said wearer database-(93) includes a plurality of latest wearing dates and times and a plurality of change intervals corresponding to a plurality of product model types of diaper products-(2,6) associated with a wearer identification number, and

wherein said change-scheduled date and time output part-(853) outputs a next change-scheduled date and time on the basis of latest wearing date and time and a change interval of a data element including a wearer identification number read out by said second reading device (811) and a product model type of a diaper product-(2,6) read out by said first reading device (811) when said diaper product-(2,6) is put on a wearer.

51. (Currently Amended) A usage information management system for managing information on usage of diaper products, comprising: The usage information management system (810) according to claim 46, further comprising:

a first reading device for reading a product model type indicating a kind of diaper product, which is stored in an IC chip of an IC tag attached to a diaper product through an antenna of said IC tag for radio communication;

a second reading device for reading a wearer identification number for discriminating one wearer of a diaper product from other wearers;

a wearer database storage part for storing a wearer database which is a set of data elements each associating a wearer identification number with an applicable model type which is a product model type of a diaper product to be put on a wearer corresponding to said wearer identification number;

a model type check part for specifying a data element in said wearer database, which includes a wearer identification number read out by said second reading device, and checking an applicable model type in said data element with a product model type read out by said first reading device;

a wearing date and time database storage part (861) for storing a wearing date and time database (94) which is a set of data elements each associating a product model type of a diaper product (2, 6) and a wearer identification number with wearing date and time when said product model type of said diaper product (2, 6) is put on a wearer corresponding to said wearer identification number;

a wearing date and time database updating part-(862) for adding a new data element to said wearing date and time database-(94) when one diaper product-(2,6) is put on a wearer, said new data element including a product model type of said diaper product-(2,6), which is read out by said first reading device-(811), a wearer identification number read out by said second reading device-(811) and wearing date and time of said diaper product-(2,6); and

a usage frequency obtaining part-(863) for specifying a plurality of data elements having the same product model type and wearer identification number in said wearing date and time database-(94) and obtaining a usage frequency indicating the number of used diaper products in a predetermined period on the basis of wearing dates and times of said plurality of data elements.

52. (Currently Amended) The usage information management system-(810) according to claim 51, wherein a plurality of data elements in said wearing date and time database-(94) include product model types corresponding to ~~disposal~~disposable diapers-(21) and other plurality of data elements include product model types corresponding to auxiliary absorbent pads (61) attached inside said ~~disposal~~disposable diapers-(21).

53. (Currently Amended) A usage information management system for managing information on usage of diaper products, comprising: The usage information management system-(810) according to claim 46, further comprising:

a first reading device for reading a product model type indicating a kind of diaper product, which is stored in an IC chip of an IC tag attached to a diaper product through an antenna of said IC tag for radio communication;

a second reading device for reading a wearer identification number for discriminating one wearer of a diaper product from other wearers;

a wearer database storage part for storing a wearer database which is a set of data elements each associating a wearer identification number with an applicable model type which is a product model type of a diaper product to be put on a wearer corresponding to said wearer identification number;

a model type check part for specifying a data element in said wearer database, which includes a wearer identification number read out by said second reading device, and checking an applicable model type in said data element with a product model type read out by said first reading device;

a price database storage part-(871) for storing a price database-(95) which is a set of data elements each associating a product model type of a diaper product-(2, 6) with its price; and

a billing database storage part-(872) for storing a billing database-(96) which is a set of data elements each associating a wearer identification number with a billing amount for cost on usage of a diaper product-(2, 6); and

a billing database updating part-(873) for specifying a data element in said price database-(95), which includes a product model type of a diaper product-(2, 6), which is read out by said first reading device-(811), to acquire a price of said diaper product-(2, 6) and specifying a data element in said billing database-(96), which includes a wearer identification number read out by said second reading device-(811), and updating a billing amount of a data element including said wearer identification number to a sum obtained by adding said price of said diaper product-(2, 6) to said billing amount when said diaper product-(2, 6) is put on a wearer.

54. (Currently Amended) A usage information management system for managing information on usage of diaper products, comprising: The usage information management system (810) according to claim 46, further comprising:

a first reading device for reading a product model type indicating a kind of diaper product, which is stored in an IC chip of an IC tag attached to a diaper product through an antenna of said IC tag for radio communication;

a second reading device for reading a wearer identification number for discriminating one wearer of a diaper product from other wearers;

a wearer database storage part for storing a wearer database which is a set of data elements each associating a wearer identification number with an applicable model type which is a product model type of a diaper product to be put on a wearer corresponding to said wearer identification number;

a model type check part for specifying a data element in said wearer database, which includes a wearer identification number read out by said second reading device, and checking an applicable model type in said data element with a product model type read out by said first reading device;

a price database storage part (871) for storing a price database (95) which is a set of data elements each associating a product model type of a diaper product (2, 6) with its price; and

a billing database storage part (872) for storing a billing database (96) which is a set of data elements each associating a wearer identification number with a self-pay ratio and a billing amount for cost on use of a diaper product (2, 6); and

a billing database updating part (873) for specifying a data element in said price database (95), which includes a product model type of a diaper product (2, 6), which is read out by said

first reading device-(811), to acquire a price of said diaper product-(2, 6) and specifying a data element in said billing database-(96), which includes a wearer identification number read out by said second reading device-(811) and updating a billing amount of a data element including said wearer identification number to a sum obtained by adding a product of said price of said diaper product-(2, 6) and said self-pay ratio to said billing amount when said diaper product-(2, 6) is put on a wearer.

55. (Currently Amended) A diaper product management system-(910) for managing information on diaper products, comprising:

a supply information management system-(710a) managed on a supplier side, where diaper products-(1 to 4, 6) are manufactured and sold, for managing information on supply of diaper products-(1 to 4, 6); and

a usage information management system-(810) managed on a consumer side, where diaper products-(2, 6) are consumed and connected to said supply information management system-(710a) through a communication network-(911), for managing information on usage of diaper products-(2, 6),

wherein said supply information management system-(710a) comprises

(i) a supplier-side reading device-(711a) for reading a serial number stored in an IC chip of an IC tag-(5) attached to a diaper product-(1 to 4, 6) through an antenna of said IC tag-(5) for radio communication;

(ii) a product database storage part-(724) for storing a product database-(91) which is a set of data elements each associating a serial number of a diaper product-(1 to 4, 6) with process

information on a predetermined process of at least one of manufacturing, inspecting, storing, shipping and selling on supply of said diaper product ~~(1 to 4, 6);~~

(iii) a product database updating part ~~(723)~~ for specifying a data element in said product database ~~(91)~~, which includes a serial number read out by said supplier-side reading device ~~(711a)~~, and adding process information on said process to said data element;

(iv) a product information obtaining part ~~(726)~~ for specifying a data element in said product database ~~(91)~~, which includes a serial number transmitted from said usage information management system ~~(810)~~ to acquire a value of a predetermined data item in said data element as product information; and

(v) a product information transmitting part ~~(727)~~ for transmitting product information acquired by said product information obtaining part ~~(726)~~ to said usage information management system ~~(810)~~ through said communication network ~~(911)~~, and

wherein said usage information management system ~~(810)~~ comprises

(i) a consumer-side reading device ~~(811)~~ for reading a serial number stored in an IC chip of an IC tag ~~(5)~~ attached to a diaper product ~~(2, 6)~~;

(ii) a serial number transmitting part ~~(821)~~ for transmitting a serial number read out by said consumer-side reading device ~~(811)~~ to said supply information management system ~~(710a)~~ through said communication network ~~(911)~~; and

(iii) a product information output part ~~(822)~~ for receiving and outputting product information transmitted by said product information transmitting part ~~(727)~~ of said supply information management system ~~(710a)~~.

56. (Currently Amended) The diaper product management system-(910a) according to claim 55, wherein said usage information management system-(810a) further comprises a product model type transmitting part-(823) for transmitting a product model type indicating a kind of a diaper product-(2, 6), which is stored in an IC chip of an IC tag-(5) attached to said diaper product-(2, 6) and read out by said consumer-side reading device-(811), to said supply information management system-(710b) when said diaper product-(2, 6) is put on a wearer, and wherein said supply information management system-(710b) further comprises a stock database storage part-(728) for storing a stock database-(97) which is a set of data elements associating a plurality of product model types of diaper products-(2, 6) with respective stock numbers of diaper products-(2, 6) on said consumer side corresponding to said plurality of product model types; and a stock database updating part-(729) for specifying a data element in said stock database-(97), which includes a product model type transmitted from said product model type transmitting part-(823), and subtracting one from a stock number in said data element.